

CENPP-PL-CH (1105-2-10a)

12 October 1989

MEMORANDUM FOR Chief, Operations Division; ATTN: CENPP-OP-NW

SUBJECT: Supplement to Sediment Evaluation Report Titled-
"Results of 1988 Lower Willamette River Sediment Evaluation
Testing..."

1. Enclosed are the results of the additional Elutriate tests for Oregon Slough sediments collected in September 1988.
2. Please contact Mark D. Siipola at ext. 6463, if you require further information regarding this subject.

Encl
as

LAUREN J. AIMONETTO
Chief, Planning Division

CF:
CENPP-OP-NW (CARRUBA)

SEPTEMBER 29, 1989

FILE #
006-017-1-05

SUPPLEMENT TO SEDIMENT EVALUATION REPORT TITLED-
"RESULTS OF 1988 LOWER WILLAMETTE RIVER SEDIMENT TESTING"
USACE PORTLAND DISTRICT O&M DREDGING"

Summary of Additional Testing

Elutriate tests for cadmium were performed on Oregon Slough sediment samples OS-1 and OS-2 which showed relatively high cadmium levels, 1.17 ppm and 1.23 ppm respectively, as a result of the bulk chemical tests performed in November 1988. The elutriate test was performed by Battelle Pacific Northwest Division Marine Science Laboratory using stored sediment samples and fresh Snake River water. The sediment samples had been stored frozen at the Battelle Lab. Since actual receiving water was not readily available, fresh Snake River water, which is similar to Columbia River water, was substituted therefore. The results for both OS-1 and OS-2 were less than 0.039 ppb soluble cadmium in solution for these two elutriates. This is the detection limit for this element and is below EPA's fresh water chronic criteria value of 1.1 ppb. With the completion of these tests the Oregon Slough sediments are considered acceptable, from a toxicity standpoint, for unconfined in-water disposal.

This sediment quality evaluation supplement was completed by Mr. Mark D. Siipola of the Coastal and Flood Plain Management Branch, Planning Division, USACE Portland District. Analytical chemistry was performed under the direction of Dr. Eric Crecilius, Battelle Pacific Northwest Division Marine Science Laboratory, Squim, Washington.

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Pacific Northwest Division
Marine Sciences Laboratory
439 West Sequim Bay Road
Sequim, Washington 98382
(206) 683-4151

September 19, 1989

Mr. Mark Siipola
U.S. Army Corps of Engineers
P.O. Box 2946, Attn: PL-AP
Portland, Oregon 97208

Dear Mark:

Several months ago you requested the analysis of Cd in elutriates of two Oregon slough sediment samples. We processed elutriates of frozen sediments using fresh Snake River water which was available from another project and is similar to Columbia River water.

The results for both OS-1 and OS-2 are less than 0.039 $\mu\text{g/L}$ soluble cadmium in solution for these two elutriates.

Sincerely,

A handwritten signature in cursive script, appearing to read "Eric".

Eric A. Crecelius
Technical Group Leader
Marine Chemistry

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